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Rubber World

The technical service magazine for the rubber industry

Volume 197, No. 5 Feb

Heat resistance evalu

Co-vulcanization in NR/EPDM blends

Fatty derivative mold release agents

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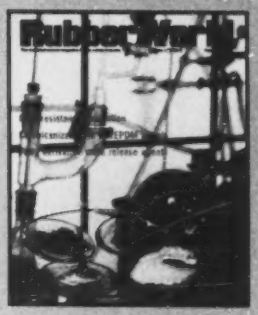

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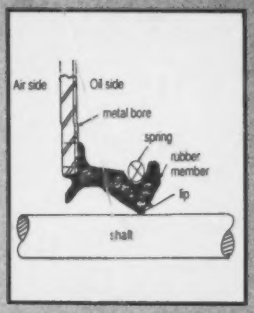

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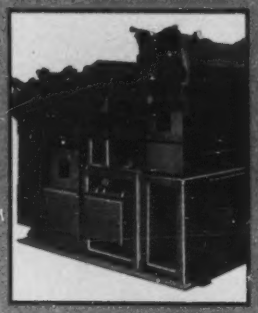

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Editorial

Requests to editorialize are nothing new. The daily mail usually brings a request from some person, organization, special interest group, etc. telling us we should write an editorial on...The phone many days brings a voice saying we should write an editorial on... When you go to meetings, invariably someone will buttonhole one of us and urge us to write an editorial on...

The requests vary. Some are legitimate. Many make you think, "just who does this person think reads this magazine?" One common request comes from various members of the Rubber Division and is similar to requests of members of the different rubber groups. They want more members and somehow think we can sway people to join. We appreciate the thought that we have that sort of influence, but what's puzzling is what can we tell those in the rubber industry about the benefits of membership in these organizations that any serious minded professional doesn't already know? The activities of the Rubber Division and the rubber groups are well documented in the rubber trade press. If someone decides that one doesn't have anything to offer him so be it. That person is not long for the rubber industry anyway. Persuading someone to improve one's knowledge in his career field seems unnecessary.

But you admire the persistence of those trying to increase membership. But maybe their results would be better if they targeted the company managements with their lobbying efforts. It seems that some of them aren't sold on the benefits of having their employees join and attend the various meetings that are offered. It's no coincidence that most of the successful companies have good representation at both the rubber group and Rubber Division. And most of these members take an active part within the organization. Companies may have their reasons for not actively encouraging employees to join, but no good ones have been brought forth. One disturbing excuse is that some companies view the meetings as chances for their employees to seek other employment. So start leaning on management. We support the Division and the groups and frankly find it incomprehensible that someone serious about their profession would not join, given the opportunity to attend the meetings.

Jill Wrigley

Jill Wrigley has been promoted to managing editor for both Rubber World and Automotive Polymers & Design. Jill has been with both magazines for three years and is also editor of Rubber World's Product News. Joining the staff as associate editor is Julie Wagner

Don R. Smith
Editor

RubberWorld

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Business Briefs

Acquisitions, expansions

BASF AG of West Germany has agreed to acquire all assets of the latex division of **Polysar Ltd.** Sale price is estimated at $500 million (Canadian). Polysar's latex division has plants in Chattanooga, TN, Monaca, PA, Sarnia, Ont., Strasbourg, France and Arnhem, The Netherlands. Annual manufacturing capacity is approximately 220,000 tons. At Polysar France, BASF will enter into a long-term tolling agreement because the latex facilities cannot be separated from the rubber facilities.

Dunlop intends to establish a medium truck radial tire manufacturing facility in North America. The company is studying a number of locations, including the expansion of its existing plants in Buffalo, NY or Huntstville, AL. Production is expected during the third-quarter of 1989. The facility's output will reach upwards of 2,000 tires per day by 1991.

Avery Inc. said it intends to sell its **Uniroyal Chemical** subsidiary. Avery acquired Uniroyal Chemical in 1986.

Goodyear established a regional quality assurance laboratory in Akron, OH for testing materials used in the company's North American tire production.

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Mobay completed its acquisition of **Denka Chemical** and renamed the operation **Mobay Synthetics Corp.** Headquartered in Houston, TX, the new Mobay unit has plants in Houston, Duluth, MN and Cateret and Little Ferry, NJ. Polychloroprene rubber is the main product manufactured along with maleic anhydride and tetrahydrophthalic anhydride. Mobay also completed a major expansion of research and development facilities at the company's headquarters in Pittsburgh, PA adding 50,000 sq. ft.

VMI Americas dedicated its new 26,000 sq. ft. facility in Stow, OH for the design and manufacturing of machinery for the tire and rubber industry.

Versa Machinery moved to a 22,000 sq. ft. plant in Branchburg, NJ, doubling its plant capacity for its downstream handling equipment.

J.M. Huber Corp.'s Calcium Carbonate division will construct a new calcium carbonate plant at Nolanville, TX, with start-up planned for the third quarter of this year.

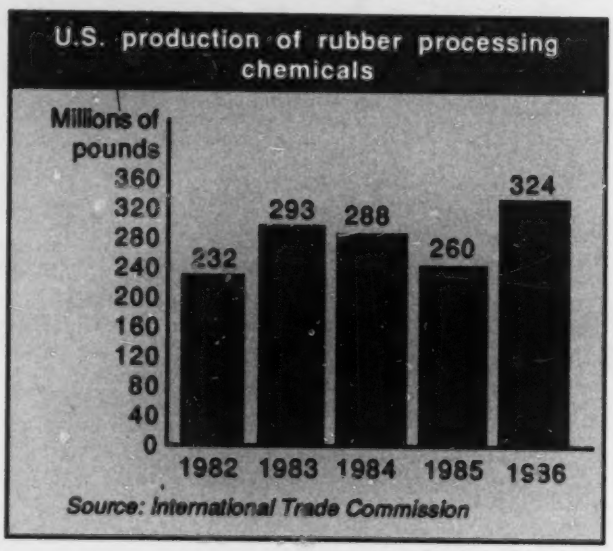
Amax Inc., Greenwich, CT, acquired a substantial portion of the assets of **Humphrey Chemical**, Aberdeen, MD, to help Amax's expansion in the polymer market for flame retardants and smoke suppressants.

RPI/Dexter Plastics increased capacity by 40% with the completion of a $3 million expansion to its purpose-built thermoplastic polyolefins plant in Grand Prairie, TX. Overall capacity for TPOs, blends, alloys and PVC compounds is now over 270 million pounds annually.

Legg Co., Halstead, KS, purchased the assets of **American Rubber Manufacturing**, Oakland, CA. The acquisition was for the operations only and does not include the plant. Legg plans to continue manufacturing custom-molded products and hose in Oakland, but it will relocate the conveyor equipment to Halstead.

Arco Chemical acquired more than 80% of the stock of **Chiuglong Petrochemical Co.**, the only producer of propylene oxide and its derivatives in Taiwan.

ICI Specialty Chemicals has formed ICI Polymer



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Additives, combining a number of the company's activities in specialty polymer additives into one organization dedicated to the supply of additives for solving problems.

Findlay Industries opened a 20,000 sq. ft. development facility in Troy, MI, for its automotive trim products. Findlay and **Woodbridge Foam** of Ontario, Canada, in a joint venture, purchased the **Allen Industries** manufacturing unit of **Day Corp.** Allen, an automotive trim manufacturer has facilities in Compton, CA, El Paso, TX, Rochester Hills, MI and Chihuahua, Mexico.

H. Heller & Co., a supplier of raw materials, opened a Rubber Division in Findlay, OH.

Air Products and Chemicals will construct a $5 million new product development laboratory at its Pace, FL chemicals complex. The facility will produce drum quantities of new or improved amine-based products for customer testing and evaluation.

National Wax, Skokie, IL, purchased the assets of **Paragon Wax Refining**, San Francisco, CA.

Detroit Testing Laboratory, Oak Park, MI expanded its mechanical test services department to include 3,000 sq. ft. of facilities dedicated to fuel system component testing.

Emery Chemicals successfuly completed the second phase of a debottlenecking in the manufacture of azelaic acid.

UCB S.A. acquired **Medical Industries Inc.**, Bloomfield, CT, a converter of flexible films specializing in the sterile packaging of medical products.

Contracts, licenses

Shell Chemical and **Japan Synthetic Rubber** have formed a joint venture to market solution styrene-butadiene rubber to the U.S. tire industry. The new venture will be called **Deltadyne Solution Elastomers**. The SBR will bear the tradename Deltaflex and will be supplied by the partners' affiliates in Europe and Japan and inventoried in the U.S. The partners also will evaluate the possibility of establishing a domestic manufacturing base.

BFGoodrich and **Dunlop Malaysia** have formed BFG Sime Aerospace Services in Kuala Lumpur, Malaysia. New aircraft tire production and aircraft tire retread operations will be done at an existing Dunlop Malaysia plant and the tires will be sold under the BFGoodrich brand. Dunlop Malaysia is part of **Sime Darby**.

TSE Industries, Clearwater, FL has added **Sovereign Chemical**, Cuyahoga Falls, OH and **A & M Chemical**, Indianapolis, IN as sales representatives for its millable polyurethanes. **C.P. Hall** remains as distributor for the western states.

Chemical Exchange Industries, Houston, TX and **Du Pont** signed a long-term agreement whereby CXI will refine and market hexamethyleneimine, a co-product of hexamthylene diamine, a nylon 66 precursor.

Mitchell, Inc., Elkhart, IN signed rep agreements with **Chemrep**, Inc., Palatine, IL; **Barchem Associates**, Atkinson, NH and **Lescon, Inc.**, Flemington, NJ. The companies will make sales and service calls for Mitchell's cutters and grinders.

Resinall Corp. appointed **RJ Chemicals** as a sales agent for its hydrocarbon, modified rosin and rosin ester, rosin maleic and rosin modified phenolic resins.

Occidental Chemical appointed **Stochem Inc.**, Brampton, Ontario as exclusive distributor for its Dechlorane Plus line of flame retardant additives for Canada.

CHR Industries, New Haven, CT has added **Budnick Supply**, St. Louis, MO and **Matrix U.S.A.**, Clearwater, FL as distributors.

Financial statements

Arco Chemical reported net income of $257 million on revenues of $1.95 billion for 1987

Blasius Industries had a second quarter operating income of $1.2 million on net sales of $13 million.

Cabot Corp. reported a 1987 net income of $29 million on sales of $1.4 billion.

GenCorp reported net income of $475 million in 1987 on net sales of $1.6 billion.

Parker Hannifin reported second quarter net income of $25.4 million on sales of $529 million.

PPG Industries reported net earnings for 1987 were $377.1 million on sales of $5.18 billion.

The Standard Products Co. had a second quarter net income of $7.7 million on sales of $126.1 million.

Markets, news

Although 1987 reversed a trend that prevailed for several years, the International Institute of Synthetic Rubber Producers projects consumption of synthetic rubber to decrease

Business Briefs

in North America by 1.5% in 1988. Robust tire sales and a healthy export market contributed to the 3.5% increase in consumption in 1987 according to the IISRP. They don't see that rate continuing, citing a slowdown in car sales being the chief factor in the anticipated reduction. The IISRP sees a 1.5% growth for the five year period from 1988 through 1992.

Although not included in the North American total, the IISRP has begun collecting data on thermoplastic elastomers. Consumption during the forecast period is expected to rise nearly 38%, a gain of over 6% annually. TPE consumption will account for more than 10% of all synthetic rubber polymers consumed in North America by 1992.

Goodyear predicts that total U.S. tire demand in 1988 should remain as strong as 1987, with slightly less demand for new car tires possibly offset by stronger replacement tire demand. Goodyear chairman Robert Mercer said the replacement market in 1987 at 150 million units is as big as it has ever been and 1988 should be as strong. Mercer said high performance radial tire demand reached 21 million units or nearly 11% of the tire market in 1987 and by 1992 output will be nearly 30 million. Original equipment tire sales in the truck tire market was near 3.3 million in 1987, 74% of that total being radial. 1988 sales are expected to reach the same level with radialization reaching 78% according to Mercer.

The United Rubber Workers adopted bargaining goals for their upcoming negotiations with the "Big Three" rubber companies. Contracts with Firestone, Goodyear and Uniroyal Goodrich expire April 20, affecting 27,000 of the union's 110,000 members. Considerable measures were outlined regarding improving job security. In the area of plant closures and layoffs, the policy called for a plant closing moratorium during future agreements "except for conditions beyond the company's control." Also, the policy called for company commitment to making investments in the plant or plants covered by collective bargaining agreements with the goal of maintaining or improving competitiveness. Further, the policy called for "no outsourcing of products when those products are made, or are capable of being made by URW-represented plants." Other goals adopted included: a meaningful wage increase; maintenance of COLA clauses where they presently exist and extension of COLA clauses to those contracts that presently do not provide such protection, improved pension benefit levels for both active and present retirees; continued efforts toward the health care cost containment program which was adopted by the union's local presidents meeting in 1984; and opposition to unwarranted concessions.

RMA tire report through October (figures in thousands of units)

Passenger tires	YTD '87	YTD '86	% change
Shipments			
original equipment	44,968	46,493	-3.28
radial	38,155	39,119	-2.46
replacement	126,625	121,445	4.27
radial	113,647	104,852	8.39
export	4,814	3,342	44.05
radial	4,205	2,567	63.81
total	176,407	171,280	2.99
radial	156,007	146,538	6.46
Production	140,229	134,028	4.63
radial	123,410	113,424	8.80
Truck & bus tires			
Shipments			
original equipment	6,646	5,833	13.94
radial	4,623	3,912	18.17
replacement	28,837	27,115	6.35
radial	15,668	13,010	20.43
export	1,686	1,098	53.55
radial	1,200	656	82.93
total	37,169	34,046	9.17
radial	21,491	17,578	22.26
Production	29,865	25,934	15.16
radial	16,925	12,698	33.29

Rubber end use percentage in tire and tire products

	U.S.A.	Canada	North America
Styrene butadiene - dry	71.8	81.3	72.5
Styrene butadiene - latex	11.1	12.4	11.2
Polybutadiene	73.3	80.0	73.9
Ethylene - propylene	4.3	8.7	4.4
Nitrile - solid	3.8	0.5	3.6
Other synthetic (*)	36.3	53.3	37.3
Total synthetic	42.0	49.2	43.0
Natural	72.4	72.2	72.3
Total rubber	49.6	58.4	50.4

** includes polyisoprene and butyl* *source: IISRP*

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